



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,486	01/18/2002	John D. Phillips	24457B	1435

22889 7590 05/19/2004

OWENS CORNING
2790 COLUMBUS ROAD
GRANVILLE, OH 43023

EXAMINER

A, PHI DIEU TRAN

ART UNIT	PAPER NUMBER
----------	--------------

3637

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,486	PHILLIPS, JOHN D.	
	Examiner	Art Unit	
	Phi D A	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The indicated allowability of claims 2-3, 6, 8, 11 is withdrawn in view of the newly discovered reference(s) to Wall and Corbin et al. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

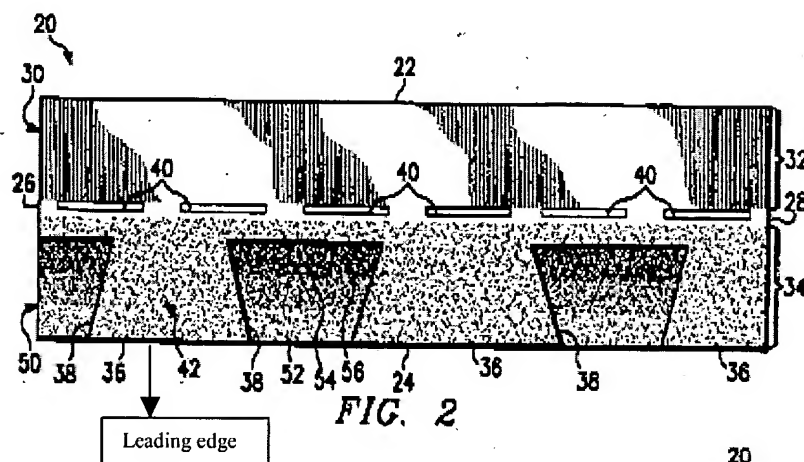
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al (5666776) in view of Wall (1915964) and Corbin et al (4274243).

Weaver et al (below) shows a laminated roofing shingle having an overlay(20) having an underside and a plurality of spaced apart tabs (36), each one of the tabs (36) having a leading edge (see below), the tabs defining openings adjacent the tabs, an underlay (50) attached to the underside of the overlay to cooperatively form the laminated roofing shingle, the underlay having a leading edge (52), a second shadow line (56), a remaining portion between the leading edge of the underlay and the second shadow line, the leading edge of the underlay generally co-aligning with the leading edge of the tabs, the underlay having a portion exposed through the openings defined adjacent the tabs, a layer of granules disposed on the underlay, the granules on the second shadow line of the underlay being substantially darker than the granules on the remaining portion of the underlay, said overlay and said underlay are each formed from a base

Art Unit: 3637

material comprising fiberglass mat that has been coated with asphalt, the granules on the second shadow line being black granules (col 4 line 5).



Weaver et al does not show the tab having a first shadow line and a remaining portion, a layer of granules disposed on the first shadow line of the tabs and on the remaining portion of the tabs, the granules on the first shadow line of the tabs being substantially darker in color than the granules on the remaining portion of the tabs, the granules on the first shadow line being black granules.

Weaver discloses granules of a wide range of colors from white and black to various shades of red, green, brown and any combination thereof may be used to provide a roof having the desired color shingle, the granules being applied to the tabs.

Wall (figures 1-3) shows strips (1) with tabs with a first shadow line (12) and a remaining portion to project an aesthetic appearance.

Corbin et al discloses granules with dark color being deposited on the surface of a shingle to form color bands.

Art Unit: 3637

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Weaver et al to show the tab having a first shadow line and a remaining portion as taught by Wall, a layer of granules disposed on the first shadow line of the tabs and on the remaining portion of the tabs, the granules on the first shadow line of the tabs being substantially darker in color than the granules on the remaining portion of the tabs as taught by Corbin et al, the granules on the first shadow line being black granules because forming the tabs with a first shadow line and a layer of darker color granules than that of the remaining portion would enable the formation of an aesthetic appearance to the shingles as disclosed by Wall and Corbin et al.

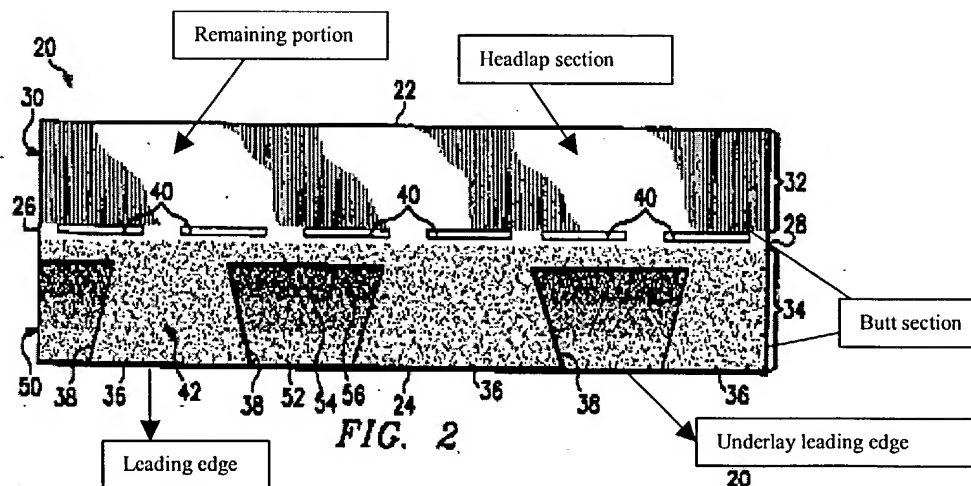
Per claims 2, 3, 6 Weaver et al as modified shows the granules on the first shadow line and the granules on the shadow line on the trailing edge of the tabs being generally uniform in color, the shadow line on the trailing edge of the tabs being substantially narrow relative to the shadow line on the trailing edge of the underlay in combination with other claimed limitations.

3. Claims 7-11, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al (5666776) in view of Wall (1915964) and Corbin et al (4274243).

Weaver et al (below) shows a laminated roofing shingle comprising an overlay having an underside, headlap section (sections comprise of 30 or 32), a plurality of spaced apart tabs (36) extending from the headlap section, the headlap section having a leading edge (the leading edge of 30 or 32), each one of the tabs having a leading edge (36), an outer surface, an underlay (50) attached to an underside of the overlay to cooperatively form the laminated roofing shingle, the underlay having an outer surface, a leading edge, a trailing edge, a second shadow line (56) and a remaining portion (54) between the leading edge of the underlay and the second shadow line, the

Art Unit: 3637

tabs and the leading edge of the headlap section defining openings, the leading edge of the underlay generally co-aligning with the leading edge of the tabs, the second shadow line and the remaining portion of the underlay being on the outer surface of the underlay, the second shadow line extending from the trailing edge of the underlay to the remaining portion of the underlay, the underlay having a portion exposed through the openings defined by the tabs and the leading edge of the headlap section, the second shadow line being exposed through the opening and adjacent the leading edge of the headlap section, a layer of granules disposed on the underlay, the granules on the second shadow line (56) being substantially darker than the granules on the remaining portion of the underlay, the overlay and the underlay each being formed from a base material comprising a fiberglass mat that has been coated with asphalt, the granules on the granules on the second shadow line being black, a second shadow line (56).



Weaver et al does not show the tab having a first shadow line and a remaining portion, said first shadow line and the remaining portion being on the outer surface of the tabs, the first shadow line extending from the leading edge of the tabs to the remaining portion of the tabs, a layer of granules disposed on the first shadow line of the tabs and on the remaining portion of the

tabs, the granules on the first shadow line (42) of the tabs being substantially darker in color than the granules on the remaining portion of the tabs.

Weaver discloses granules of a wide range of colors from white and black to various shades of red, green, brown and any combination thereof may be used to provide a roof having the desired color shingle, the granules being applied to the tabs.

Wall (figures 1-3) shows strips (1) with tabs with a first shadow line (12) and a remaining portion to project an aesthetic appearance.

Corbin et al discloses granules with dark color being deposited on the surface of a shingle to form color bands.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Weaver et al to show the tab having a first shadow line and a remaining portion, said first shadow line and the remaining portion being on the outer surface of the tabs as taught by Wall, the first shadow line extending from the leading edge of the tabs to the remaining portion of the tabs, a layer of granules disposed on the first shadow line of the tabs and on the remaining portion of the tabs, the granules on the first shadow line (42) of the tabs being substantially darker in color than the granules on the remaining portion of the tabs as taught by Corbin et al because forming the tabs with a first shadow line and a layer of darker color granules than that of the remaining portion would enable the formation of an aesthetic appearance to the shingles as disclosed by Wall and Corbin et al.

Per claim 21, Weaver et al as modified shows the leading edge granules being darker than the remaining portion having granules thereon.

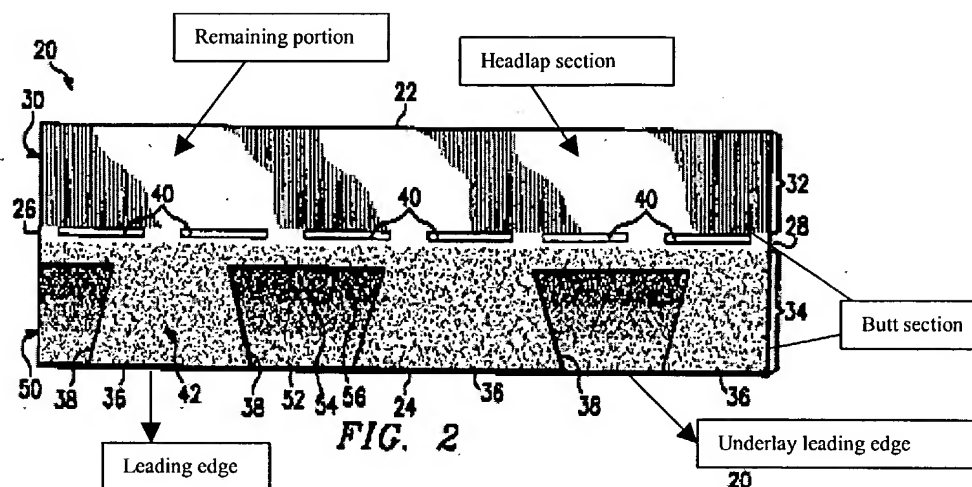
Art Unit: 3637

Per claims 8, 11, Weaver et al as modified shows the granules on the first shadow line and the granules on the shadow line on the trailing edge of the tabs being generally uniform in color, the shadow line on the trailing edge of the tabs being substantially narrow relative to the shadow line on the trailing edge of the underlay in combination with other claimed limitations.

4. Claims 24, 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al (5666776) in view of Wall (1915964) and Corbin et al (4274243).

Weaver et al (below) shows a laminated roofing shingle having a headlap section and a butt section (the section starting below 30 or 32) comprising an overlay having a tab (36), the tab having an outer surface with a trailing edge adjacent the headlap section and a leading edge (36) spaced from the trailing edge, the tab having a width, an underlay (50) attached to an underside of the overlay, the underlay having an outer surface, the underlay outer surface positioned adjacent the tab with a trailing edge (26) adjacent the headlap section, a leading edge spaced from the trailing edge and first colored granules (42) adhered to the outer surface of the tab adjacent the leading edge of the tab, second colored granules (the part around the openings 40) adhered to the outer surface of the tab separated from the leading edge (36) of the tab by the first colored granules, the second colored granules having a different coloration or shade than the first colored granules, third colored granules (56) adhered to the trailing edge of the outer surface of the underlay, fourth color granules (52) adhered adjacent the leading edge of the outer surface of the underlay having different coloration or shade than the third colored granules, ,

Art Unit: 3637



the third colored granules (56) form a shadow line adjacent the trailing edge of the outer surface of the underlay, the third colored granules comprise darker granules than the fourth colored granules, the first and third colored granules comprise black colored granules, a second tab (the next tab), the second tab adjacent the outer surface of the underlay, the second tab having sixth colored granules (42) forming a shadow line adjacent a leading edge of the second tab.

Weaver et al does not show said first colored granules form a shadow line adjacent the leading edge of the tab across substantially the entire width of the tab, the first colored granules (42) comprise darker granules than the second colored granules, the first colored granules comprise black colored granules, the second tab having sixth colored granules (42) forming a shadow line adjacent a leading edge of the second tab.

Weaver discloses granules of a wide range of colors from white and black to various shades of red, green, brown and any combination thereof may be used to provide a roof having the desired color shingle, the granules being applied to the tabs.

Wall (figures 1-3) shows strips (1) with tabs with a first shadow line (12) and a remaining portion to project an aesthetic appearance.

Corbin et al discloses granules with dark color being deposited on the surface of a shingle to form color bands.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Weaver et al to show the first colored granules form a shadow line adjacent the leading edge of the tab across substantially the entire width of the tab, the first colored granules comprise darker granules than the second colored granules, the first colored granules comprise black colored granules, the second tab having sixth colored granules forming a shadow line adjacent a leading edge of the second tab because having the first colored granules form a shadow line adjacent the leading edge of the tab across substantially the entire width of the tab, the first colored granules comprise darker granules than the second colored granules, the first colored granules comprise black colored granules, the second tab having sixth colored granules forming a shadow line adjacent a leading edge of the second tab would form an aesthetic appearance to the shingles as disclosed by Wall and Corbin et al

5. Claims 25, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al (5666776) in view of Wall (1915964) and Corbin et al (4274243).

Weaver et al shows as modified shows all the claimed limitations except for fifth colored granules adhered to the outer surface of the tab separated from the first and sixth colored granules by the second colored granules, the fifth colored granules having different coloration or shade than the second colored granules and forming a shadow line adjacent the headlap section.

Weaver et al further discloses individual shingles being manufactured in a variety of weights and colors being well known, a color gradient or gradation can be put on portions of the shingle to create the illusion of thickness or depth on a relatively flat surface.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Weaver et al's modified structures to show fifth colored granules adhered to the outer surface of the tab separated from the first colored granules by the second colored granules, the fifth colored granules having different coloration or shade than the second colored granules and forming a shadow line adjacent the headlap section because having a color gradient on the shingle would create the illusion of thickness or depth on a relatively flat surface as taught by Weaver et al.

6. Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al (5666776) in view of Wall (1915964) and Corbin et al (4274243).

Weaver et al as modified shows all the claimed limitations. The claimed method steps of making a laminated roofing shingle would have been the obvious method steps of making Weaver et al's modified laminated shingle.

7. Claims 34-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver et al (5666776) in view of Wall (1915964) and Corbin et al (4274243).

Weaver et al as modified shows all the claimed limitations. The claimed method steps of making a laminated roofing shingle would have been the obvious method steps of making Weaver et al's modified laminated shingle.

Response to Arguments

8. Applicant's arguments with respect to claims 1-45 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different coloring of shingles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 703-306-9136. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phi Dieu Tran A

5/15/04